## Some reflections on the IT challenges for a Multilingual Semantic web

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1. **Most important challenges/barriers/problems and pressing needs with respect to the multilingual access to the Semantic Web (SW):**
   Many attempts have been made to provide multilinguality to the Semantic Web, by means of annotation properties in Natural Language (NL), such as RDFs or SKOS labels, and other lexicon-ontology models, such as lemon, but there are still many issues to be solved if we want to have a truly accessible Multilingual Semantic Web (MSW). Reusability of monolingual resources (ontologies, lexicons, etc.), accessibility of multilingual resources hindered by many formats, reliability of ontological sources, disambiguation problems and multilingual presentation to the end user of all this information in NL can be mentioned as some of the most relevant problems. Unless this NL presentation is achieved, MSW will be restricted to the limits of IT experts, but even so, with great dissatisfaction and disenchantment.
2. **Why does the problem matter in practice? Which industry sectors or domains are concerned with the problem?**
   Considering Linked Data as a step forward from the original Semantic Web, providing the possibility of accessing all the information gathered in all the ontological resources should become one significant objective, if we want every user to "perform searches in their own language", as mentioned in the motivation of Dagstuhl Seminar. Globalization of work has opened the scope of possible domains and sectors interested in Linked data and a true MSW. From governmental, political, administrative and economic issues to medicine, chemistry, pharmaceutical, car makers and other industries alike, all would hop on the bandwagon of MSW if it provides them the suitable information needed for their businesses. As long as we cannot retrieve the answer to a question in NL, even if we have the possible information in DBpedia and other ontological and knowledge resources, it will be difficult to beat Google, and extract the most of LD and the SW, no matter how many "semantic" resources we have.
3. **Which figures are suited to quantify the magnitude or severity of the problem?**
   It is difficult for us to quantify the problem in figures, but it is clear that we can miss the boat if this issue remains unsolved. In the last few years the mobile industry has made advances at a greater speed, maybe because there were more chances to make money.
4. **Why do current solutions fail short?**
   At the moment, we have complex models to be implemented by SW illiterate, many technological issues unsolved, and a lack of agreement with respect to the ontological-lexical linguistic knowledge to be provided to end-users when using the SW to improve their resources.
5. **What insights do we need in order to reach a principled solution? What could a principled solution look like?**
   Focusing on certain aspects that can be agreed upon by many key sectors (researchers, developers, industry, end-users), some relevant problems could be approached aiming

at delimiting the wishes, needs and resources available. A principled solution should be based on simplicity, usefulness, wide coverage, and reusability.

6. **How can standardization (e.g. by the W3C) contribute?**
   It can contribute because participation is open to many sectors involved. If all sectors cooperate, dissemination and promotion can be achieved more easily. Getting other standardization committees involved (ISO TC 37) can also widen the scope and can contribute to dissemination too. But it is important to get industry professionals involved to make them aware of the possibilities they have to make the most of their products.